A Snapshot of Kidney Cancer

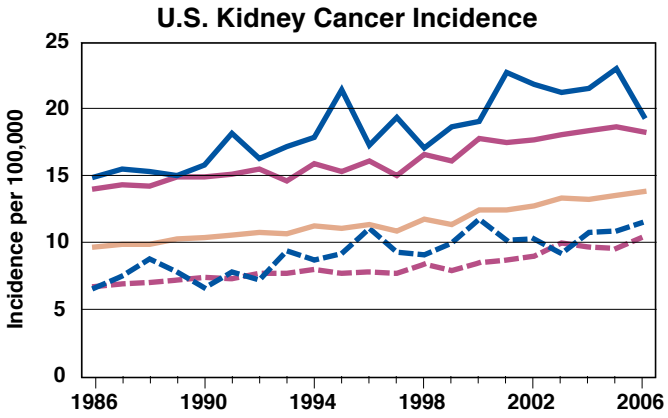
Incidence and Mortality Rate Trends

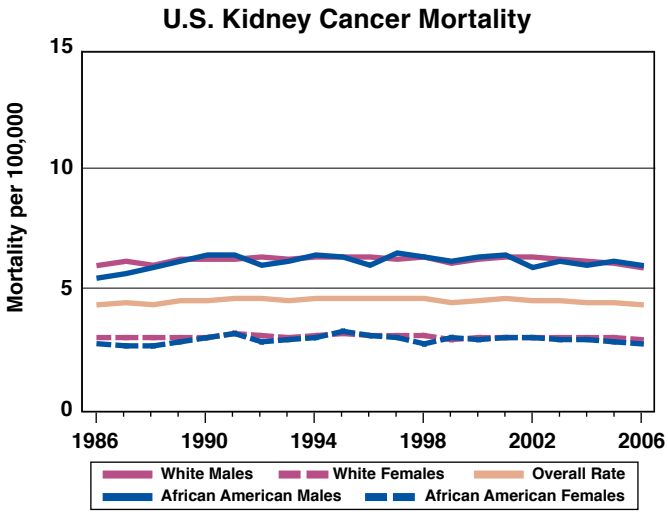
Kidney cancer incidence has been increasing steadily for the past 65 years; the reasons for this increase are unclear. The overall mortality rate from kidney cancer has increased slightly over the past two decades, but has recently begun to decrease. Kidney cancer incidence and mortality rates are more than twice as high in men as in women.

It is estimated that approximately $1.9 billion[1] is spent in the United States each year on treatment of kidney cancer.

Source for incidence data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at http://seer.cancer.gov/.

[1]Cancer Trends Progress Report (http://progressreport.cancer.gov), in 2004 dollars, based on methods described in *Medical Care* 2002 Aug;40(8 Suppl):IV-104–17.



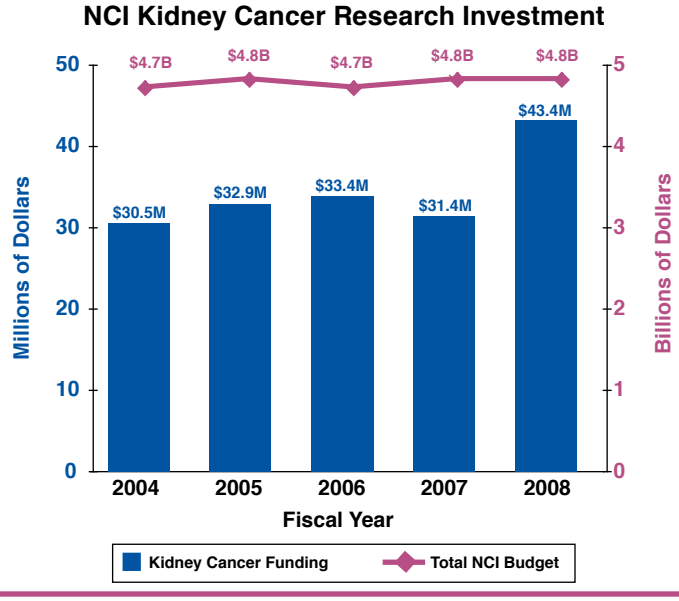


Trends in NCI Funding for Kidney Cancer Research

The National Cancer Institute's (NCI) investment[2] in kidney cancer research increased from $30.5 million in fiscal year 2004 to $43.4 million in fiscal year 2008.

Source: NCI Office of Budget and Finance (http://obf.cancer.gov).

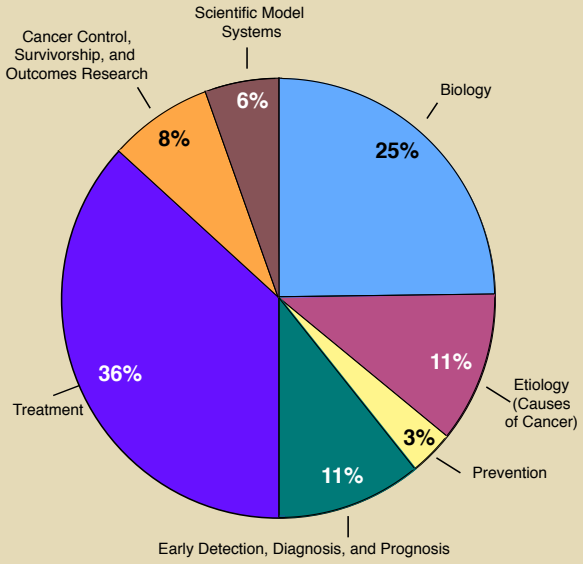
[2]The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see http://www.nih.gov/about/.



Examples of NCI Activities Relevant to Kidney Cancer

- One genitourinary cancer-specific **Specialized Program of Research Excellence (SPORE)** is identifying kidney cancer early detection markers, developing novel kidney cancer treatments, and studying the impact of surgical removal of the kidney on survival. http://spores.nci.nih.gov/current/genitourinary/index.htm
- NCI's **Targeted Combinations for Metastatic Kidney Cancer** is comparing different combinations of bevacizumab, sorafenib tosylate, and temsirolimus in patients with metastatic kidney cancer. http://www.cancer.gov/clinicaltrials/ft-ECOG-E2804
- The **Kidney/Bladder Progress Review Group (PRG)**, a panel of prominent scientists and patient advocates, assessed the state of the science and identified future research priorities for kidney and bladder cancers. http://planning.cancer.gov/library/2002kidneyreport.pdf
- The **Early Detection Research Network (EDRN)** is at the forefront of technology-driven research related to the early detection of cancer. Current studies include the use of methylation and proteomics-based approaches to detect kidney cancer. http://edrn.nci.nih.gov
- The **NCI Intramural Genitourinary Malignancies Faculty** brings together staff from NIH branches and laboratories to develop better methods for prevention, diagnosis, and treatment of genitourinary malignancies. http://ccr.cancer.gov/faculties/faculty.asp?facid=131

NCI Kidney Cancer Research Portfolio



Percentage of Total Dollars by Scientific Area
Fiscal Year 2008

Data sources: NCI's Division of Extramural Activities and the NCI Funded Research Portfolio. Only projects with assigned scientific area codes are included. A description of relevant research projects can be found on the NCI Funded Research Portfolio website at http://fundedresearch.cancer.gov

- The **What You Need to Know About™ Kidney Cancer** booklet provides information about possible causes, symptoms, diagnosis, and treatment related to kidney cancer. Information specialists can also answer questions about cancer at 1-800-4-CANCER. http://www.cancer.gov/cancertopics/wyntk/kidney
- The **Kidney Cancer Home Page** and **Wilms Tumor Home Page** provide up-to-date information on kidney cancer treatment, prevention, genetics, causes, and other topics. http://cancer.gov/kidney and http://www.cancer.gov/cancertopics/types/wilms

Selected Advances in Kidney Cancer Research

- The FDA **approved a new drug** for advanced kidney cancer. http://www.cancer.gov/ncicancerbulletin/040709/page10
- Analysis of **metabolites in the urine** may be helpful for kidney cancer diagnosis and biomarker discovery. http://www.ncbi.nlm.nih.gov/pubmed/19008263
- Researchers developed **a novel robotic technique for nephrectomy** in kidney cancer patients. http://www.ncbi.nlm.nih.gov/pubmed/18721039